THE SENATE OF TEXAS

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May 19, 2014

The Honorable Craig Estes Co-chair, Joint Interim Committee on Water Desalination State Capitol, Room 1E.9 Austin, Texas 78711

The Honorable Todd Hunter Co-chair, Joint Interim Committee on Water Desalination State Capitol, Room GW.18 Austin, Texas 78711

Dear Chairmen,

As the Senate Sponsor of House Concurrent Resolution No. 59, and member of the Joint Interim Committee to Study Water Desalination, I cordially invite you to have a public hearing of our Joint Interim Committee in Brownsville, Texas where innovating desalination efforts are underway. Having a joint hearing in Brownsville will afford our Joint Interim Committee a firsthand look of the multi-stakeholder desalination efforts that have been undertaken and provide the members a unique insight of the potential use and benefit of seawater and brackish water desalination.

Water desalination is an issue of great importance to this gulf coast/South Texas community. By some accounts, by the year 2050 the Lower Rio Grande Valley will need 184,000 acre-feet of NEW water supplies to satisfy the growing demands of our residents, businesses and industry. The Brownsville and South Texas region believe that desalinated seawater from the Gulf of Mexico (augmenting traditional sources), along with brackish water desalination, can adequately meet expected demands and address a water supply dilemma that is confronting different regions of our state.

As we research the benefits of water desalination, I encourage our Joint Interim Committee to examine Brownsville's efforts in utilizing both seawater and brackish water desalination. Brownsville has been proactive in trying to determine the viability and sustainability seawater



desalination. In fact, in order to determine the best methods for desalinating seawater in Texas, the Texas Water Development Board (TWDB), the Brownsville Public Utilities Board (BPUB), the Port of Brownsville, and NRS Consulting Engineers worked together on a pilot project at the Brownsville Ship Channel. The pilot plant collected and analyzed site-specific data in 2007 and 2008 and determined that it was technically feasible to produce drinking water from seawater. The results of that pilot study have been released and the BPUB is seeking to construct a 2.5 MGD demonstration-scale seawater desalination plant and research facility at the Port of Brownsville. I am informed that the TWDB and BPUB have met and are working to secure financial resources to further implement seawater desalination in Texas.

Additionally, BPUB is actively undertaking brackish groundwater desalination being a major partner of the Southmost Regional Water Authority (SRWA), one of our conservation and reclamation districts in Cameron County. SRWA has a state-of-the-art Brackish Groundwater Treatment Facility that uses reverse osmosis membrane technology to provide "bottled water" quality to its customers. Twenty production wells, approximately 200 to 300 feet below ground level, tap into the Rio Grande Alluvium within the Gulf Coast Aquifer. The groundwater is pumped 7.2 miles to the reverse osmosis treatment plant. At this capacity, SRWA saves an equivalent of approximately 8,400 acre feet in surface water diversions per year.

As can be seen, by scheduling a public hearing and site visits in Brownsville, the Joint Interim Committee will acquire a unique insight of existing desalination efforts of seawater and brackish water currently underway. In closing, I welcome the opportunity to work with your offices and to coordinate scheduled site visits of BPUB's desalination facilities. Rest assured that a public hearing and site visits in Brownsville will greatly assist our Joint Interim Committee's efforts to study water desalination in Texas.

Sincerely,

Eddie Lucio, Jr.

State Senator, District 27